

21st NIST Computer Modeling Workshop

DATE and LOCATION

Wednesday August 11, 2010 to Friday August 13, 2010
Lecture Room E, Administration Building
National Institute of Standards and Technology
Gaithersburg, Maryland 20899 USA

INSTRUCTORS

Jeffrey Bullard (coordinator), Dale Bentz, Edward Garboczi, Nicos Martys, and
Paul Stutzman, NIST Materials and Construction Research Division
Jeffrey Thomas, Northwestern University
James Warren, NIST Metallurgy Division
Valerie Coffman, NIST Mathematical and Computational Sciences Division

GENERAL DESCRIPTION

The workshop lectures will cover topics in the computational and experimental materials science of concrete and other materials, including simulation of microstructural development and prediction of physical properties. "Microstructure" ranges from nanometer to meter length scales, while physical properties include pressure-driven fluid flow, diffusion, rheology, mechanical properties, neutron scattering, scanning electron microscopy, and various X-radiation probes like diffraction and tomography. Close cooperation between computation and experiment is crucial for making progress in the materials science of concrete and so is an emphasis of the workshop. There will also be some coverage of the Virtual Cement and Concrete Testing Laboratory. The workshop will have a mixture of longer tutorial lectures and shorter (15 min) talks by the participants describing their current or proposed technical work.

WORKSHOP SCHEDULE: TBA

The workshop schedule is still being developed and will be posted at on the workshop website no later than June 11, 2010. Check back at <http://concrete.nist.gov> and click on the link for the 2010 Modeling Workshop for the updated schedule.

Registration

The list of workshop participants will be finalized by **July 31, 2010**, which is the application deadline. On-line registration is available and is the preferred method of registration (<http://concrete.nist.gov/monograph/>, click button for "2010 Workshop," then "Registration"). If on-line registration is not used, then the enclosed form (see below) will need to be filled out for each potential participant and sent to the coordinator (post, fax, or e-mail) in lieu of using the on-line registration site. There is no registration fee.

Housing and Meals

A partial list of hotels near NIST is available on the workshop website. Many of these hotels offer shuttle services to and from NIST. Participants are also encouraged to use their favorite travel websites to search for special rates or other accommodations.

Getting to NIST

See the following web site for detailed information about getting to NIST (e.g., taxis, shuttles, restaurants) – http://www.nist.gov/public_affairs/visitor/visitor.htm. If workshop participants land in Dulles International Airport, a taxi can be taken directly to the Gaithersburg Holiday Inn at a cost of about \$70.00. Those persons flying into Reagan National Airport can take the Metro underground train directly to the Shady Grove stop in Gaithersburg (about \$3-\$6, depending on time of day--see signs in Airport station--Yellow line to Gallery Place, Red line to Shady Grove). A taxi may be taken from there to the Gaithersburg Holiday Inn for about \$15.00. Alternatively, a taxi can be taken directly to the hotel from Reagan National for about \$65.00. From Baltimore Washington International Airport, taxis cost about \$90.00 to Gaithersburg. Shuttles are somewhat cheaper – see the airport web site for details. Driving directions to NIST are included on the NIST web site.

Security

All workshop attendees must have a picture I.D. with them to be able to enter the gates, either riding on the bus from Holiday Inn or by themselves. A U.S. driver's license or passport is fine. A temporary NIST badge will be given to you on your first entrance to NIST, which, along with your picture I.D., will allow entrance into NIST for the rest of the workshop. So don't throw it away! And please wear the NIST badge at all times while within NIST.

Note: Non-US citizens are required to give some additional information. You will see a place for this on the on-line registration, and on the form below.

Direct all questions to the Workshop coordinator:

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